

SEMICONDUCTOR APPARATUS AND  
PROCESS OF PRODUCTION THEREOF

ABSTRACT OF THE DISCLOSURE

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10 A process of production of a semiconductor  
apparatus which can suppress a rise in the electrical  
resistance and a decline in the joint strength at the  
bump connection interfaces and improve the connection  
reliability when using the method of reinforcing the  
bases of the bumps by a resin film. Bumps are formed on a  
semiconductor wafer formed with a pattern circuit of a  
semiconductor chip so as to connect to the circuit  
15 pattern, a resin film is formed on the bump forming  
surface of the semiconductor wafer to a thickness giving  
a surface lower than the height of the bumps while  
sealing the spaces between the bumps, plasma cleaning  
etc., is used to remove the sealing resin components  
20 deposited on the surface portions of the bumps or natural  
oxides or other insulating impurities to clean and  
activate the surfaces of the bumps, and the chip is  
mounted on a mounting board.

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